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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,306	09/11/2003	Nancy Desgardin	117136	3581
25944	7590	04/03/2006	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			GELLNER, JEFFREY L	
			ART UNIT	PAPER NUMBER
			3643	

DATE MAILED: 04/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/659,306

Applicant(s)

DESGARDIN ET AL.

Examiner

Jeffrey L. Gellner

Art Unit

3643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 January 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 8 and 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9, 11 and 12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>13 November 2003</u> | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Acknowledgement is made of Applicants' IDS received 13 November 2003.

#### ***Election/Restrictions***

Applicant's election with traverse of Invention I and the species of sodium borohydride in the reply filed on 18 January 2006 is acknowledged. The traversal is on the ground(s) that there is no burden to the Examiner to examine the non-elected claims. This is not found persuasive because the non-elected invention and species are considered to be patentably distinct and, hence, would necessitate searching for different limitations. This represents a burden to the Examiner. Claims 8 and 10 are withdrawn from examination because they are drawn to either the non-elected invention or species

The requirement is still deemed proper and is therefore made FINAL.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Ward (US 4,032,259).

As to claims 1 and 4-7, Ward discloses a solid composition that will decompose to hydrogen comprising an alkali metal borohydride, sodium borohydride (col. 2 lines 46-56) and

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strontium nitrate (col. 2 lines 58-62), devoid of organic matter, where the composition is 90% sodium borohydride and strontium nitrate (from col. 3 lines 26-44).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2,3, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ward (US 4,032,259).

As to claims 2 and 3, the limitations of claim 1 are disclosed as described above. Not disclosed is the composition compact, a grain. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the composition of Ward by making it into a compact grain depending upon use of the composition.

As to claim 9, the limitations of claim 1 are disclosed as described above. Not disclosed is the composition's ratio being between 1 and 10 of alkali borohydride to strontium nitrate. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the composition of Ward by making the composition with a ratio of 1 and 10 for alkali borohydride to strontium nitrate depending upon use of the composition.

Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ward (US 4,032,259) in view Wagaman (US 6,165,295).

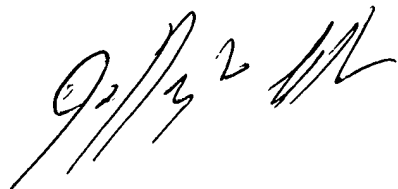
As to claims 11 and 12, Ward discloses the solid composition of claim 1. Not disclosed is the using the composition in a hydrogen generator to supply hydrogen to a proton membrane fuel cell. Wagaman, however, discloses that a rocket propellant can be used for a fuel cell (col. 3 lines 44-48). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the composition of Ward by using in a fuel cell to generate hydrogen as disclosed by Wagaman depending of application of the fuel and to use as fuel cell with a proton exchange membrane fuel cell as a well known, readily available fuel cell.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey L. Gellner whose telephone number is 571.272.6887. The examiner can normally be reached on Monday-Friday, 8:30-4:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on 571.272.6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jeffrey L. Gellner  
Primary Examiner  
Art Unit 3643